ABSTRACT OF THE DISCLOSURE

An input shaft is provided with a plurality of drive gears, an output shaft is provided with a plurality of driven gears respectively engaging with the drive gears, and 5 transmission gear trains are formed by the respective engaged gears. An input clutch for transmitting a power to the input shaft is provided between an engine and the input shaft, and a bypass clutch for transmitting the power to the output shaft is provided between the input shaft and the output shaft. The apparatus is provided with a changing mechanism for changing 10 any one of the transmission gear trains in a power transmission state, a steering angle detecting means for detecting a steering angle of a wheel, and an input clutch control means for engagement controlling the input clutch. 15 The input clutch control means inhibits a shifting operation in a state of disengaging the input clutch, by inhibiting an output of a disengagement signal to the input clutch, in the case that the steering angle is more than an allowable value, and a shifting in a state of engaging no bypass clutch is 20 judged.